

	Document ID	Issue Lemma	Da	Pag	Ti
1	US 3579831 A	U 19710525	5	BONE	
2	US 3729825 A	U 19730501	9	ORAL	
3	US 3849888 A	U 19741126	8	BONE	
4	US 3851393 A	U 19741203	10	ORAL	
5	US 4397634 A	U 19830809	6	Surgical	
6	US 4531915 A	U 19850730	13	Dental	
7	US 4579531 A	U 19860401	4	Dental	
8	US 4624673 A	U 19861125	7	Device	
9	US 4713003 A	U 19871215	9	Fixture	
10	US 4744755 A	U 19880517	9	Dental	
11	US 4744754 A	U 19880517	9	Dental	
12	US 4826434 A	U 19890502	5	Dental	
13	US 4904187 A	U 19900227	6	Dental	
14	US 4934935 A	U 19900619	13	Dental	
15	US 4938694 A	U 19900703	5	Screw	
16	US 4960381 A	U 19911002	9	Screw	
17	US 4966599 A	U 19901030	21	Anatomic	
18	US 5040982 A	U 19910820	9	Dental	
19	US 5052930 A	U 19911001	11	Dental	
20	US 5064425 A	U 19911112	6	Anchor	
21	US 5088926 A	U 19920218	4	Implant	
22	US 5100323 A	U 19920331	9	Dental	
23	US 5116225 A	U 19920526	14	Angular	
24	US 5199873 A	U 19930406	9	Dental	
25	US 5209659 A	U 19930511	9	Method	
26	US 5259398 A	U 19931109	14	Method	
27	US 5263996 A	U 19931123	9	Dental	
28	US 5302126 A	U 19940412	9	Dental	
29	US 5312256 A	U 19940517	9	Dental	
30	US 5312254 A	U 19940517	9	Sterile	
31	PT 101033 A	D 19940531	1	Titanium	
32	US 5366374 A	U 19941122	9	Dental	
33	US 5542847 A	U 19960806	9	Method	
34	US 5558618 A	U 19960924	9	Semi-	
35	US 5562670 A	U 19961108	9	Holding	
36	US 5571017 A	U 19961105	9	Select	
37	US 5593410 A	U 19970114	9	Screw	
38	US 5642996 A	U 19970701	9	Endosseous	
39	US 5727943 A	U 19980317	9	Self-	
40	US RE35784 E	U 19980505	9	Submitted	
41	US 5752830 A	U 19980519	9	Removal	
42	US 5769852 A	U 19980623	9	Implant	
43	US 5772437 A	U 19980630	9	Securing	
44	US 5816813 A	U 19981006	9	Implant	
45	US 5816812 A	U 19981006	9	Dental	
46	US 5842865 A	U 19981201	9	Self-tightening	
47	US 5885079 A	U 19990323	9	Select	
48	US 5897319 A	U 19990427	9	Self-tightening	
49	US 5938444 A	U 19990817	9	Fixture	
50	US 5951287 A	U 19990914	9	Dental	
51	US 5984681 A	U 19991116	9	Dental	

tissue to grow into and through these openings and to permit blood tissue to escape.

#### TITLE - TI (1):

Screw-type dental implant anchor

#### Brief Summary Text - BSTX (1):

This invention relates to a screw-type dental implant anchoring means comprising an externally-threaded, preferably self-tightening body portion. The implant has internal means for engaging means for inserting the implant into an opening formed in bone tissue to receive the implant. This internal means is, preferably, a wrench-engaging surface. In preferred embodiments, the body portion is joined to a top portion having an unthreaded exterior wall. Preferably, the internal means for implant insertion is inside that top portion, but can alternatively be inside the body portion. The top or head portion is open, preferably chamfered at its upper end, and in registration with an internal, threaded shaft. This shaft is inside the body portion of the anchor, and extends from a plane just below the head portion downwardly a substantial distance inside the body portion of the anchor.

#### Brief Summary Text - BSTX (5):

The anchoring means is preferably made of commercially-pure titanium, and preferably has an outside thread diameter of not more than about 4 millimeters. The anchoring means preferably has a length in the range of about 5 to about 20 millimeters in preferred embodiments.

#### Drawing Description Text - DRTX (2):

FIG. 1 is a perspective view of one embodiment of the dental implant anchor of this invention;

#### Drawing Description Text - DRTX (5):

FIG. 4 is a perspective view of another dental implant anchor embodiment that includes internal means for engaging means for inserting the implant into bone tissue; and

#### Drawing Description Text - DRTX (6):

FIG. 5 shows an elevational view, in cross-section, of another dental implant anchor embodiment.

#### Detailed Description Text - DETX (5):

Internally-threaded passage 8 inside implant 1 can receive a variety of cementable and threaded adaptors already in use, such as threaded copings, threaded screws, and cementable dental prostheses. See, for example, the

	Document ID	Issue Date	Page	Title
1	US 3579831 A	U 19710525	5	BONE
2	US 3729825 A	U 19730501	9	ORAL
3	US 3849888 A	U 19741126	8	BONE
4	US 3851393 A	U 19741203	10	ORAL
5	US 4397634 A	U 19830809	6	Surgical
6	US 4531915 A	U 19850730	13	Dental
7	US 4579531 A	U 19860401	4	Dental
8	US 4624673 A	U 19861125	7	Device
9	US 4713003 A	U 19871215	9	FIGURE
10	US 4744755 A	U 19880517	9	Dental
11	US 4744754 A	U 19880517	9	Dental
12	US 4826434 A	U 19890502	5	Dental
13	US 4904187 A	U 19900227	6	Dental
14	US 4934935 A	U 19900619	13	Dental
15	US 4938694 A	U 19900703	5	Screw
16	US 4960381 A	U 19901002	9	Screw
17	US 4966599 A	U 19901030	21	Anatomic
18	US 5040982 A	U 19910820	9	Dental
19	US 5052930 A	U 19911001	11	Dental
20	US 5064425 A	U 19911112	6	Anchor
21	US 5088926 A	U 19920218	4	Implant
22	US 5100323 A	U 19920331	9	Dental
23	US 5116225 A	U 19920526	14	Angular
24	US 5199873 A	U 19930406	9	Dental
25	US 5209659 A	U 19930511	9	Method
26	US 5259398 A	U 19931109	14	Method
27	US 5263996 A	U 19931123	1	Dental
28	US 5302126 A	U 19940412	1	Dental
29	US 5312256 A	U 19940517	1	Dental
30	US 5312254 A	U 19940517	1	Sterile
31	PT 101033 A	D 19940531	1	Titanium
32	US 5366374 A	U 19941122	1	Dental
33	US 5542847 A	U 19960806	1	Method
34	US 5558618 A	U 19960924	1	Semi-
35	US 5562670 A	U 19961008	1	Holding
36	US 5571017 A	U 19961105	1	Select
37	US 5593410 A	U 19970114	1	Screw
38	US 5642996 A	U 19970701	1	Endosseous
39	US 5727943 A	U 19980317	1	Self-
40	US RE35784 E	U 19980505	1	Submerge
41	US 5752830 A	U 19980519	1	Removable
42	US 5769852 A	U 19980623	1	Implant
43	US 5772437 A	U 19980630	1	Securing
44	US 5816813 A	U 19981006	1	Implant
45	US 5816812 A	U 19981006	1	Dental
46	US 5842865 A	U 19981201	1	Self-
47	US 5885079 A	U 19990323	1	Select
48	US 5897319 A	U 19990427	1	Self-
49	US 5938444 A	U 19990817	1	Fixture
50	US 5951287 A	U 19990914	1	Dental
51	US 5984681 A	U 19991116	1	Dental

connecting an artificial tooth or dental bridge to the jaws which comprises an implant portion or screw for connection to the bone, the screw having a head and a downwardly tapered shaft, an abutment portion for connection to the prosthesis, and connecting means for connecting the implant and the abutment. Preferably, the components of the invention are machined from titanium alloy.

#### Brief Summary Text - BSTX (5):

The specific problem of integrating teeth within the oral cavity by means other than superficial attachment has been addressed previously. One result is the proposal of Branemark as exemplified in Int. J. Oral Sur. 1981:10:387-416. In this proposal a generally cylindrical device is described which includes a number of connectable parts the majority of which are machined from substantially pure titanium.

#### Brief Summary Text - BSTX (9):

To accomplish this objective, the present invention provides a device for connecting a prosthesis to bone which comprises an implant portion for integration with the bone, the implant being constituted by a screw having a shaft and a head, the shaft being tapered downwardly from the head; an abutment portion for integration with the prosthesis; and connecting means for coupling the implant portion with the abutment portion. Preferably, the implant and abutment of the present invention are machined from titanium alloy for example, an alloy including 6% aluminium and 4% vanadium.

#### Detailed Description Text - DETX (2):

Referring now to FIG. 1, there is illustrated a device 10 comprising an implant 20, an abutment 40, both of which are machined from a titanium alloy and a connecting screw 60, which is machined from stainless steel.

#### Detailed Description Text - DETX (3):

Implant 20 has a tapered body 22 bearing exterior self-tapping screw threads 24 and terminates in a head 26. The upper surface 28 of head 26 defines a generally elliptical recess 30 located centrally thereon. Implant 20 defines a longitudinal, centrally located bore 32 extending from recess 30 into but not through the tapered body 22. Bore 32 is screw-threaded to receive connecting screw 60. Preferably, the pitch of the threads 24 is about 16 turns per inch.

#### Detailed Description Text - DETX (7):

The preceding description of the operative components and procedure by which the abutment and implant are connected has, for the sake of clarity, disregarded mention of any specific application of the device. In the following description, the device is described with particular reference to its utility as a means of coupling a dental prosthesis, i.e. a single artificial tooth or a dental bridge to the jaws.